

10/586116

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/071956 A1

(51) International Patent Classification⁷: **H04N 7/01**

(21) International Application Number:
PCT/EP2004/012483

(22) International Filing Date:
4 November 2004 (04.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
04090021.9 21 January 2004 (21.01.2004) EP

(71) Applicant (for all designated States except US): **THOMSON LICENSING S.A.** [FR/FR]; 46 Quai A. le Gallo, F-92100 Boulogne-Billancourt (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HERPEL, Carsten** [DE/DE]; Schwarze-Dorn-Str. 4, 30974 Wennigsen (DE). **KEESEN, Heinz, Werner** [DE/DE]; Siemensstr. 22, 30173 Hannover (DE). **SCHEWZOW, Andrej** [DE/DE]; Talaverastr. 14, 30163 Hannover (DE). **WINTER, Marco** [DE/DE]; Böhmerstr. 17, 30173 Hannover (DE).

(74) Agent: **HARTNACK, Wolfgang**; Deutsche Thomson-Brandt GmbH, European Patent Operations, Karl-Wiechert-Allee 74, 30625 Hannover (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

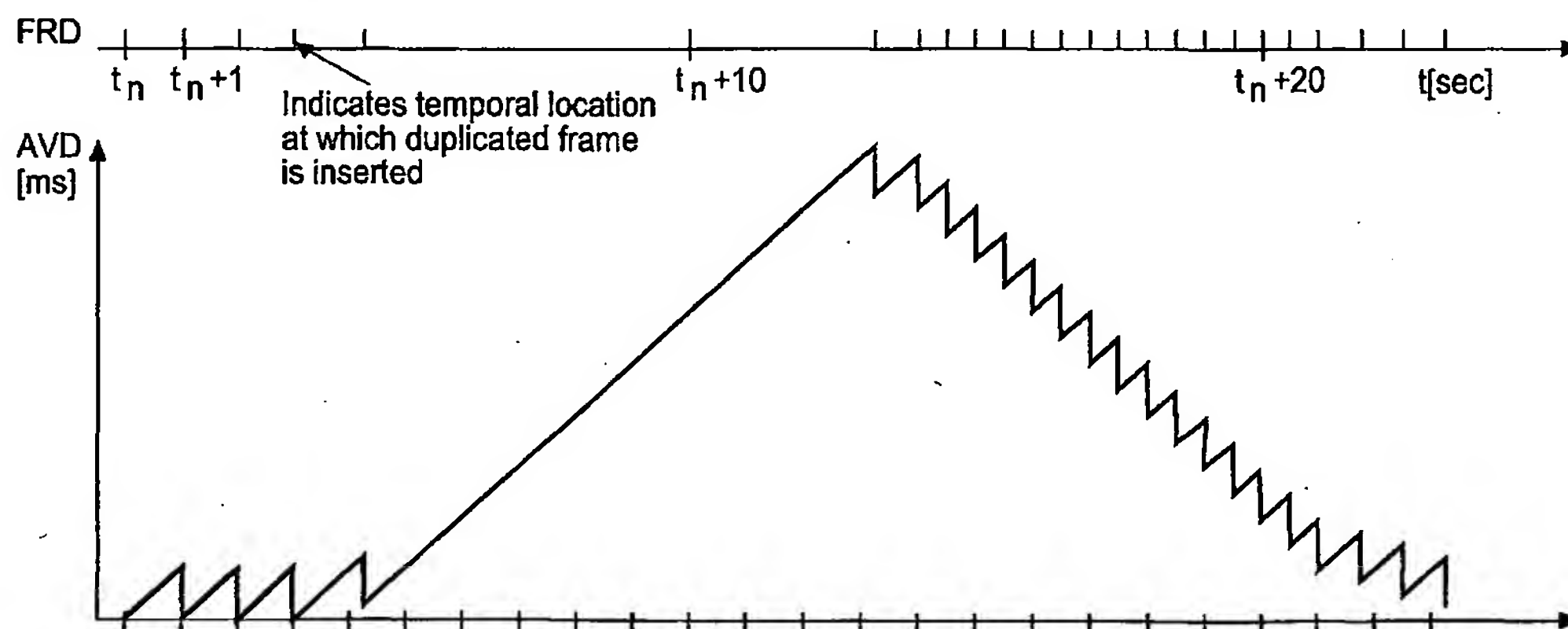
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR CONTROLLING THE INSERTION OF ADDITIONAL FIELDS OR FRAMES INTO A FIRST FORMAT PICTURE SEQUENCE IN ORDER TO CONSTRUCT THEREFROM A SECOND FORMAT PICTURE SEQUENCE



(57) Abstract: The major TV systems in the world use interlaced scanning and either 50Hz field frequency or 60Hz field frequency. However, movies are produced in 24Hz frame frequency and progressive scanning, which format will be used for future digital video discs to be sold in 50Hz countries. In 50Hz display devices the disc content is presented with the original audio pitch but with repeated video frames or fields in order to achieve on average the original video source speed. However, the frame or field insertion is not carried out in a regular pattern but adaptively in order to reduce visible motion judder.

WO 2005/071956 A1